AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Presently Amended) Leukocyte stimulation matrix for the stimulation of leukocytes and/or the induction of an immunological tolerance having the following components:

a) ~~one or more carriers(s)~~ at least one carrier,

b) a soluble matrix for embedding ~~one or more component(s)~~ at least one component for generating a leukocyte stimulation and/or the induction of an immunological tolerance,

c) ~~one or more component(s)~~ at least one component embedded into the soluble matrix for generating a leukocyte stimulation and/or the induction of an immunological tolerance.

2. (Presently Amended) Leukocyte stimulation matrix according to claim 1, ~~which additionally contains one or more coupling component(s)~~ further comprising at least one component for mediating the binding between the carrier and the ~~one or more component(s)~~ at least one component for generating a leukocyte stimulation and/or the induction of an immunological tolerance.

3. (Original) Leukocyte stimulation matrix according to claim 2, wherein the binding is a covalent binding.

4. (Presently Amended) Leukocyte stimulation matrix according to ~~one of the preceding claims~~ claim 1, wherein the at least one component for generating a leukocyte stimulation and/or the induction of an immunological tolerance is selected

from the group consisting of antigens, MHC molecules, co-stimulatory factors, cell components, cell coatings, bacteria, viruses and combinations thereof.

5. (Presently Amended) Leukocyte stimulation matrix according to ~~one of the preceding claims~~ claim 4, wherein the at least one component for generating a leukocyte stimulation and/or the induction of an immunological tolerance is a synthetic antigen or is obtained from viruses, bacteria, fungi, tumours, allergens, ~~or~~ endogenous tissue, and/or the MHC molecule; and

the co-stimulatory factors are obtained from endogenous tissue, cell cultures and/or synthetically.

6. (Presently Amended) Leukocyte stimulation matrix according to claim 4 ~~or~~ 5, wherein the at least one component for generating a leukocyte stimulation and/or the induction of an immunological tolerance is a virus of the family of herpes viruses or a fragment thereof~~, preferably a cytomegalo virus or a fragment thereof~~.

7. (Presently Amended) Leukocyte stimulation matrix according to ~~one of the preceding claims~~ claim 1, wherein the carrier is selected from the group consisting of polyurethanes, polycarbonates, polystyrene, dissolvable materials used in surgery, glass, natural materials ~~such as gut skins or~~, biological materials ~~such as sponges or~~, and combinations thereof.

8. (Presently Amended) Leukocyte stimulation matrix according to ~~one of claims 2 to 7~~ claim 2, wherein the at least one coupling component is selected from the group consisting of cyanogen bromide, cyanoboro hydride, agarose, agarose derivatives, silane, silane derivatives ~~or~~, and combinations thereof.

9. (Original) Leukocyte stimulation matrix according to claim 8, wherein the silane derivative is an alkoxy silane~~, preferably an anhydroalkoxy silane or another alkoxy silane having at least one carboxyl group~~.

10. (Presently Amended) Leukocyte stimulation matrix according to ~~any one of the preceding claims~~ claim 1, wherein the soluble matrix is made of long chain sugar compounds ~~such as~~ selected from the group consisting of starch, cellulose, and glycogen ~~on the one hand and~~/or polyethylene glycol ~~on the other hand~~.

11. (Presently Amended) Leukocyte stimulation matrix according to claim 10, wherein the soluble matrix is made of 50-90 wt.%~~, preferably 60-80 wt.%~~ of a long chain sugar compound and 10-50 wt.%~~, preferably 20-40 wt.%~~ of polyethylene glycol, based on the total of long chain sugar compound and polyethylene glycol.

12. (Presently Amended) Leukocyte stimulation module comprising a housing with at least one opening and a leukocyte stimulation matrix according to ~~any one of the preceding claims contained therein~~ claim 1.

13. (Presently Amended) Leukocyte stimulation module according to claim 12 comprising at least one inlet opening and at least one outlet opening~~, preferably one inlet opening and one outlet opening~~.

14. (Presently Amended) A process for the stimulation of leukocytes and/or the induction of an immunological tolerance ~~characterized in that~~ wherein a leukocyte containing liquid is contacted with a leukocyte stimulation matrix according to ~~any one of claims 1 to 11~~ claim 1.

15. (Presently Amended) A process according to claim 14, wherein the contacting is carried out in a leukocyte stimulation module according to claim 12 ~~or 13~~.

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18. (New) Leukocyte stimulation matrix according to claim 6, wherein the at least one component for generating a leukocyte stimulation and/or the induction of an immunological tolerance is a cytomegalo virus or a fragment thereof.

19. (New) Leukocyte stimulation matrix according to claim 7, wherein the natural material is a gut skin.

20. (New) Leukocyte stimulation matrix according to claim 7, wherein the biological material is a sponge.

21. (New) Leukocyte stimulation matrix according to claim 9, wherein the alkoxy silane is at least one of an anydroxyalkyoxy silane and another alkoxy silane comprising at least one carboxyl group.

22. (New) Leukocyte stimulation matrix according to claim 11, wherein the soluble matrix is made of 60-80 wt.% of a long chain sugar compound and 20-40 wt.% of a polyethylene glycol, based on the total of long chain sugar compound and polyethylene glycol.

23. (New) Leukodyte stimulation module according to claim 13, comprising one inlet opening and one outlet opening.

24. (New) A method for the stimulation of leukocytes and/or the induction of an immunological tolerance comprising providing a leukocyte stimulation matrix according to claim 1.

25. (New) A method for detecting distribution of activated T-cell subtypes or for vaccinations comprising providing a leukocyte stimulation matrix according to claim 1.